

AMENDMENTS TO THE CLAIMS:

The following claims replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of communicating speech using very low digital data bandwidth, comprising ~~the steps of:~~
 - providing a bi-directional digital telephony link over a digital packet network between a source terminal and a destination terminal,
 - wherein the source terminal for a forward link serves as the destination terminal for a reverse link on the digital telephony link;
 - translating said speech into text at a at the source terminal;
 - communicating said text across a communication link the bi-directional digital telephony link to a to the destination terminal; and
 - determining a status of the telephony link;
 - ending the communicating if the telephony link is terminated;
 - generating a speaker voice profile by training the source terminal to recognize words spoken by a speaker for reproduction of audible speech corresponding to words spoken by the speaker having audible qualities approximating that of the speaker;
 - communicating the voice profile across the telephony link from the source terminal to the destination terminal,
 - wherein the speaker's voice profile contains the information needed to generate

the reproduced speech that substantially resembles the sound of the speaker's voice;

and

translating said text into reproduced speech received at said destination terminal
using the speaker's voice profile at the destination terminal.

2. (Previously presented) The method of claim 1, further comprising the step
of:

generating said reproduced speech using a default voice profile.

3-6 (Canceled)

7. (Previously presented) The method of claim 1, further comprising the step
of:

generating said reproduced speech using a speaker's voice profile at said
destination terminal, wherein said speaker's voice profile contains the information
needed to generate said reproduced speech that substantially resembles the sound of
said speaker's voice.

8. (Currently Amended) The method of claim [[6]] 7, further comprising the
steps of:

generating said reproduced speech using a default voice profile of said destination terminal, until said speaker's voice profile has been communicated across said communication link; and

generating said reproduced speech using said speaker's voice profile at said destination terminal, after said speaker's voice profile has been communicated across said communication link.

9. (Currently Amended) The method of claim [[4]] 1, wherein:

a portion of said training is performed during a portion of the time said speaker is communicating speech across said communication link.

10. (Previously presented) The method of claim 9, wherein:

said speaker's voice profile is periodically updated as said speaker uses said method, and

said updated profile is periodically communicated to said destination terminal.

11-15. (Canceled)

16. (Currently Amended) A method of communicating ~~conversational~~ speech for a telephone conversation across a bi-directional communication link using very low digital data bandwidth, comprising ~~the steps of:~~

providing a bi-directional digital telephony link over a digital network between a source terminal and a destination terminal,

wherein the source terminal for a forward link serves as the destination terminal for a reverse link on the digital telephony link;

translating a first speaker's speech into first text characters at ~~a first~~ the source terminal;

communicating, from the source terminal, said first text characters across ~~said~~ communication link the digital telephony link to ~~a second~~ the destination terminal;

determining, from the source terminal, whether the bi-directional digital telephony link has terminated, and if the digital telephony link has terminated then ending the translating and the communicating from the source terminal;

translating said first text characters into first reproduced speech at ~~said second~~ the destination terminal;

translating a second speaker's speech into second text characters at ~~said~~ second the destination terminal;

communicating said second text characters across ~~said communication link~~ the digital telephony link to ~~said first~~ the source terminal; and

determining, from the destination terminal, whether the bi-directional digital telephony link has terminated, and if the digital telephony link has terminated then ending the translating and the communicating from the destination terminal; and

translating said second text characters into second reproduced speech at ~~said first~~ the source terminal.

17. (Currently Amended) The method of claim 16, further comprising ~~the step of:~~

providing ~~said first~~ the source terminal with a first voice profile of said first speaker; and

providing ~~said second~~ the destination terminal with a second voice profile of said second speaker;

communicating said first voice profile across said bi-directional ~~communication~~ digital telephony link to ~~said second~~ the destination terminal; and

communicating said second voice profile across said bi-directional ~~communication~~ digital telephony link to said first terminal;

generating said first reproduced speech using said first speaker's voice profile at ~~said second~~ the destination terminal;

generating said second reproduced speech using said second speaker's voice profile at ~~said first~~ the source terminal, wherein

said first speaker's voice profile contains the information needed to generate said first reproduced speech that substantially resembles the sound of said first speaker's voice, and

said second speaker's voice profile contains the information needed to generate said second reproduced speech that substantially resembles the sound of said second speaker's voice.

18. (Currently Amended) The method of claim 17, further comprising the ~~steps of:~~

generating said first reproduced speech using a default voice profile of ~~said second~~ the destination terminal, until said first speaker's voice profile has been communicated across ~~said communication~~ the digital telephony link;

generating said second reproduced speech using a default voice profile of ~~said first~~ the source terminal, until said second speaker's voice profile has been communicated across ~~said communication~~ the digital telephony link;

generating said first reproduced speech using said first speaker's voice profile at said second terminal, after said first speaker's voice profile has been communicated across ~~said communication~~ the digital telephony link; and

generating said second reproduced speech using said second speaker's voice profile at ~~said first~~ the source terminal, after said second speaker's voice profile has

been communicated across ~~said communication~~ the digital telephony link.

19. (Currently Amended) The method of claim 18, wherein:
said first text and said first speaker's voice profile are simultaneously
communicated across ~~said communication~~ the digital telephony link; and
said second text and second speaker's voice profile are simultaneously
communicated across ~~said communication~~ the digital telephony link.

20. (Currently Amended) The method of claim 18, wherein:
said first speaker's voice profile is provided by first training at ~~said first~~ the
source terminal; and
said second speaker's voice profile is provided by second training at ~~said~~
~~second~~ the destination terminal, and wherein
said first training comprises said first speaker speaking a number of words,
which can be pre-determined words, expected words, or unexpected but recognized
words, and
said second training comprises said second speaker speaking a number of
words, which can be pre-determined words, expected words, or unexpected but
recognized words.

21. (New) The method of claim 1, wherein the translating said speech into text comprises translating the speech into digitally coded symbols.

22. (New) The method of claim 1, wherein the translating said speech into text comprises translating the speech into digitally coded characters.

23. (New) The method of claim 1, further comprising:
after the ending of the communicating, determining if the telephony link is re-connected; and
continuing the communicating when the determining indicates that the telephony link is re-connected.

24. (New) The method of claim 16, wherein the translating the first speaker's speech into the first text characters comprises translating the first speaker's speech into first digitally coded symbols representing the first text characters, and
the translating the second speaker's speech into the second text characters comprises translating the first speaker's speech into second digitally coded symbols representing the second text characters.

25. (New) The method of claim 16, wherein the translating the first speaker's speech into the first text comprises translating the first speaker's speech into first digitally coded symbols representing the first text characters, and

the translating the second speaker's speech into the second text characters comprises translating the first speaker's speech into second digitally coded symbols representing the second text characters.

26. (New) A system of communicating speech using very low digital data bandwidth, comprising:

a digital packet network;

a source terminal and a destination terminal operatively connected over the packet network on bi-directional digital telephony link

wherein the source terminal for a forward link serves as the destination terminal for a reverse link on the digital telephony link;

wherein the source terminal translates speech into text, communicates the text across the bi-directional digital telephony link to the destination terminal, determines a status of the telephony link, ends the communication if the telephony link is terminated,

generates a voice profile by recognizing words spoken by a speaker for reproduction of audible speech corresponding to words spoken by the speaker having audible qualities approximating that of the speaker, and

communicates the voice profile across the telephony link to the destination terminal, and

wherein the speaker's voice profile contains the information needed to generate the reproduced speech that substantially resembles the sound of the speaker's voice; and

wherein the destination terminal translates the text into reproduced speech at using the speaker's voice profile received at the destination terminal.

27. (New) The method of claim 26, wherein the source terminal translates said speech into text as digitally coded symbols.

28. (New) The method of claim 26, wherein the source terminal translates said speech into text as digitally coded characters.

29. (New) The method of claim 26, further comprising:
wherein, after the source terminal communicates the text the source terminal determines if the telephony link is re-connected, and upon detection of re-connection of the telephony link, continues to communicate the text to the destination terminal.